

# इंटरनेट

# मानक

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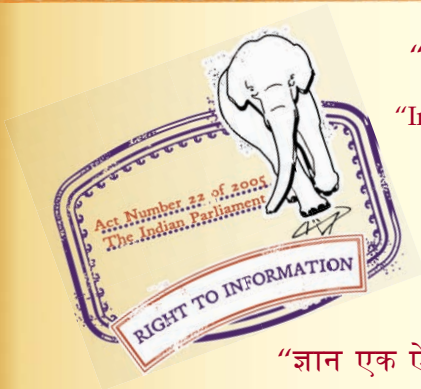
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IS 6175-8 (1992): Screwing Taps, Part 8: Screwing Taps for Pipe Threads Taper Rc Series [PGD 32: Cutting tools]



“ज्ञान से एक नये भारत का निर्माण”

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“Invent a New India Using Knowledge”



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Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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भारतीय मानक

पेंच वाली चूड़ियाँ काटने के औजार

भाग 8 पाइप चूड़ियाँ टेपर, आरसी श्रृंखला वाली चूड़ियाँ काटने  
के औजार — विशिष्ट*Indian Standard***SCREWING TAPS****PART 8 SCREWING TAPS FOR PIPE THREADS TAPER Rc SERIES —  
SPECIFICATION**

UDC 621.993 : 621.882.082.22

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**BUREAU OF INDIAN STANDARDS**  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

**AMENDMENT NO. 1    JANUARY 1996**  
**TO**  
**IS 6175 ( Part 8 ) : 1992    SCREWING TAPS**  
**PART 8    SCREWING TAPS FOR PIPE THREADS TAPER R<sub>c</sub>**  
**SERIES — SPECIFICATION**

Typographical errors have crept in the text of this standard as far as 'year of printing' is concerned. Year of printing shall be read as '1992' in place of '1991' in the text of the following Indian Standards wherever it appears:

IS 6171, IS 6173 ( Part 2 ) and IS 6175 ( Parts 1 to 3 and Parts 6 and 7 ).

(PE 10)

Reprography Unit, BIS, New Delhi, India

## FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Thread Cutting Taps and Dies Sectional Committee had been approved by the Production Engineering Division Council.

This standard for hand screwing taps for Rc series threads was covered in IS 7796 : 1971 'Specification for hand taps for pipe threads taper'.

In this revision to bring out all product standards on screwing taps under parts of an Indian Standard, the changes are as under.

The dimensions for threaded portion of the taps have been deleted and now covered in IS 6173 (Part 2) : 1991.

Consequent to adoption of ISO 7/1 as IS 554 : 1985, the Rc 3½ has been deleted in IS 554 : 1985, hence in this standard also Rc 3½ does not find a place.

This standard is in full conformity with ISO 2284 : 1987 'Hand taps for pipe threads for parallel and taper threads — General dimensions and marking' issued by the International Organization for Standardization ( ISO ).

Other Indian Standards on screwing taps of this series are:

IS 6175 ( Part 1 ) : 1991	Screwing taps: Part 1 Hand and short machine screwing taps for ISO metric screw threads sizes M 1 to M 2·5 — Specification ( <i>second revision</i> )
IS 6175 ( Part 2 ) : 1991	Screwing taps: Part 2 Hand and short machine screwing taps for ISO metric screw threads sizes M 3 to M 10 — Specification ( <i>second revision</i> )
IS 6175 ( Part 3 ) : 1991	Screwing taps: Part 3 Hand and short machine screwing taps for ISO metric screw threads sizes M 3 to M 68 with coarse pitches and M 3 to M 100 with fine pitches — Specification ( <i>second revision</i> )
IS 6175 ( Part 4 ) : 1991	Screwing taps: Part 4 Long shank machine screwing taps for ISO metric screw threads sizes M 3 to M 24 — Specification ( superseding IS 7821 )
IS 6175 (Part 5) : 1991	Screwing taps: Part 5 Nut screwing taps for ISO metric screw threads sizes M 3 to M 68 with coarse pitches — Specification ( superseding IS 6174 )
IS 6175 (Part 6) : 1991	Screwing taps: Part 6 Screwing taps for pipe threads parallel G series — Specification ( superseding IS 6172 )
IS 6175 (Part 7) : 1991	Screwing taps: Part 7 Screwing taps for pipe threads parallel Rp series — Specification ( superseding IS 6172 )

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

# *Indian Standard*

## SCREWING TAPS

### PART 8 SCREWING TAPS FOR PIPE THREADS TAPER Rc SERIES — SPECIFICATION

#### 1 SCOPE

This standard covers the dimensions and requirements for screwing taps for pipe threads taper Rc series conforming to IS 554 : 1985 'Dimensions for pipe threads where pressure tight joints are made on threads (*third revision*)' range from Rc 1/16 to Rc 4 with relieved shank. This may be used as a hand screwing tap as well as a machine screwing tap.

#### 2 REFERENCES

The following Indian Standards are necessary adjuncts to this standard:

<i>IS No.</i>	<i>Title</i>
6171 : 1991	Screwing taps technical supply conditions
6173 ( Part 2 ) : 1991	Screwing taps dimensions and tolerances on threaded portion of screwing taps: Part 2 For G, Rp and Rc series threads

#### 3 GENERAL DIMENSIONS

**3.1** Dimensions of screwing taps for pipe threads Rc series shall be as given in Table 1.

#### 4 TOLERANCES

**4.1** Tolerances on overall length and radial run-out shall be according to IS 6171 : 1991.

**4.2** Dimensions and tolerances on threaded portion of screwing taps shall be according to IS 6173 ( Part 2 ) : 1991.

#### 5 MATERIAL

The material of screwing tap shall be as given in 4 of IS 6171 : 1991.

#### 6 HARDNESS

The hardness of screwing tap shall be as given in 5 of IS 6171 : 1991.

#### 7 GENERAL REQUIREMENTS

**7.1** The number of flutes shall be as given below:

<i>Diameter</i>		<i>No. of Flutes</i>
From	To	
Rc 1/16	Rc 1/4	3 or 4
Rc 3/8	Rc 2	4 or 6
Rc 2½	—	6 or 8
Rc 3	Rc 4	8 or 10

**7.2** For requirements not covered in this standard, shall conform to the requirements of IS 6171 : 1991.

#### 8 DESIGNATION

**8.1** Screwing taps shall be designated by the name, nominal size, number of this standard and material from which it is made.

**8.2** A hand screwing tap of size Rc 1/2 conforming to this standard and made of high speed steel ( HSS ) shall be designated as:

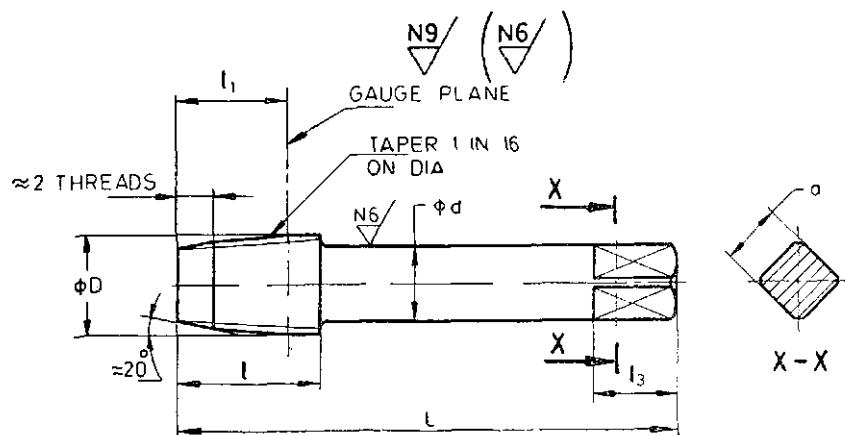
Screwing Tap IS 6175 ( Part 8 ) Rc 1/2 HSS

#### 9 MARKING

**9.1** Screwing taps shall be marked with appropriate information as per 10 of IS 6171 : 1991.

Table 1 Dimensions of Screwing Taps for Pipe Threads Rc Series Screwing Taps  
( Clause 3.1 )

All dimensions in millimetres.



Designation	Nominal Dia <i>D</i>	Pitch	<i>d</i> h 9	<i>l</i> +2 -1	<i>l</i> <sub>1</sub> Max	<i>L</i>	Square	
							<i>a</i> h 11	<i>l</i> <sub>3</sub>
Rc 1/16	7.723	0.907	5.6	14	10.1	52	4.5	7
Rc 1/8	9.728	0.907	8.0	15	10.1	59	6.3	9
Rc 1/4	13.157	1.337	10.0	19	15.0	67	8.0	11
Rc 3/8	16.662	1.337	12.5	21	15.4	75	10.0	13
Rc 1/2	20.955	1.814	16.0	26	20.5	87	12.5	16
Rc 3/4	26.441	1.814	20.0	28	21.8	96	16.0	20
Rc 1	33.249	2.309	25.0	33	26.0	109	20.0	24
Rc 1-1/4	41.910	2.309	31.5	36	28.3	119	25.0	28
Rc 1-1/2	47.803	2.309	35.5	37	28.3	125	28.0	31
Rc 2	59.614	2.309	40.0	41	32.7	140	31.5	34
Rc 2-1/2	75.184	2.309	45.0	45	37.1	153	35.5	38
Rc 3	87.884	2.309	50.0	48	40.2	164	40.0	42
Rc 4	113.030	2.309	71.0	53	46.2	185	56.0	56

NOTE — The figures are indicative of dimensions only and do not specify design features.



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#### Amendments Issued Since Publication

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